## **AUTHOR INDEX**

Agudelo, M.M.R. de, see De Agudelo, M.M.R. 1 Anders, K., see Wilde, M. Becker, K., see Wendlandt, K.-P. Behrsing, T., see Wilshier, K.G. 339 Beltramini, J. and Trimm, D.L. Catalytic reforming of n-heptane on platinum, tin and platinum-tin supported on alumina 113 Bernal, S. --, Botana, F.J., Garcia, R., Ramirez, F. and Rodriguez-Izquierdo, J.M. Preparation of lanthana supported rhodium catalysts. Occurrence of heavy carbonation phenomena on the support 267 Berteau, P. --, Ceckiewicz, S. and Delmon, B. Role of the acid-base properties of aluminas, modified -alumina, and silica-alumina in 1-butanol dehydration 361 Berthier, Y., see Pradier, C.-M. Berube, M.N. --, Sung, B. and Vannice, M.A. Sulphur poisoning of supported palladium methanol synthesis catalysts 133 Borowiecki, T. Nickel catalysts for steam reforming of hydrocarbons: direct and indirect factors affecting the coking rate 207 Bosch, H. --, Bruggink, A.A. and Ross, J.R.H. Selective oxidation of n-butane to maleic anhydride under oxygen-deficient conditions over V-P-O mixed oxides 323 Botana, F.J., see Bernal, S. 267 Bremer, H., see Wendlandt, K.-P. Bruggink, A.A., see Bosch, H. 323 Cant, N.W., see Kohler, M.A. 309 Cant, N.W., see Kwan, M.Y.H. 25 Ceckiewicz, S., see Berteau, P. Cervera-March, S., see Giménez, J.

221

Chary, K.V.R., see Nag, N.K. 73 Costa, J., see Giménez, J. 221 De Agudelo, M.M.R. --, Reyes, G.L. and Do Campo, N. The role of transition metal sulfides in hydrotreatment. III. Acidity, XPS and catalytic activity 1 Delmon, B., see Berteau, P. 361 Do Campo, N., see De Agudelo, M.M.R. 1 Espinoza, R.L. --, Nicolaides, C.P., Korf, C.J. and Snel, R. Catalytic oligomerization of ethene over nickel-exchanged amorphous silica-alumina; effect of the nickel concentration 259 Feldhaus, R., see Wilde, M. 99 Fujimoto, K. and Shikada, T. Selective synthesis of C2-C5 hydrocarbons from cárbon dioxide utilizing a hybrid catalyst composed of a methanol synthesis catalyst and zeolite 13 Garcia, R., see Bernal, S. 267 Gevert, B.S. --, Otterstedt, J.-E. and Massoth, Kinetics of the HDO of methyl-substituted phenols 119 Giménez, J. --, Costa, J. and Cervera-March, S. Catalysis by ion-exchange sulfonated resins: comparative study of gel and macroporous types and influence of divinylbenzene concentration 221 Grant, R.B., see Tan, S.A. 159 Hobert, H., see Wendlandt, K.-P. Irabien, J.A., see Lopez, L.F. 179 Jacobs, P.A., see Perez-Pariente, J. 35 Kohler, M.A. --, Lee, J.C., Trimm, D.L., Cant, N.W. and Wainwright, M.S. Preparation of Cu/SiO2 catalysts by the ion-exchange technique 309 Korf, C.J., see Espinoza, R.L. 259 Kwan, M.Y.H. --, Cant, N.W., Trimm, D.L. and Wainwright, M.S.

Modified alumina supports for catalytic oxidation of benzene to maleic anhydride over vanadia 25

Lambert, R.M., see Tan, S.A. 159 Lee, J.C., see Kohler, M.A. 309 Lefferts, L.

--, Van Ommen, J.G. and Ross, J.R.H. The silver-oxygen interaction in relation to oxidative dehydrogenation of methanol 291

Lombardo, E.A., see Nudel, J.N. 275

Lopez, L.F.

--, Ortiz, M.I. and Irabien, J.A.
Relation between homogeneous
acid catalysis and ion exchange
resins using a test reaction
179

Margot, E., see Pradier, C.-M. 243 Martens, J.A., see Perez-Pariente, J. 35

Martin, G.A.

-- and Ng, C.F. Poisoning of small metal particles by poison islands: a statistical approach based on the ensemble model 235

Massoth, F.E., see Gevert, B.S. 119

Mole, T., see Wilshier, K.G. 339 Mörke, W., see Wendlandt, K.-P. 65 Nag, N.K.

--, Chary, K.V.R., Rao, B.R. and Subrahmanyam, V.S. Characterzation of supported vanadium oxide catalysts by low temperature oxygen chemisorption technique: II.

The V<sub>05</sub>/Si0<sub>2</sub> system 73 Ng, C.F., see Martin, G.A. 235 Nicolaides, C.P., see Espinoza, R.L. 259

Nudel, J.N.

--, Umansky, B.S. and Lombardo, E.A.
Bulk, surface and catalytic characterization of the Co<sub>3</sub>0<sub>4</sub>-La<sub>2</sub>0<sub>3</sub>-Al<sub>2</sub>0<sub>3</sub> system 275

Ommen, J.G. van, see Lefferts, L.

Ortiz, M.I., see Lopez, L.F. 179 Otterstedt, J.-E., see Gevert, B.S. 119

Oudar, J., see Pradier, C.-M. 243 Perez-Pariente, J.

--, Martens, J.A. and Jacobs, P.A. Crystallization mechanism of zeolite beta from (TEA)<sub>2</sub>0, Na<sub>2</sub>0 and K<sub>2</sub>0 containing aluminosilicate gels 35

Pradier, C.-M.

--, Margot, E., Berthier, Y. and Oudar, J. Butadiene hydrogenation on platinum(100) 243

Ramirez, F., see Bernal, S. 267 Rao, B.R., see Nag, N.K. 73 Reschetilowski, W.P., see Wendlandt, K.-P. 65 Reyes, G.L., see De Agudelo,

M.M.R. 1
Rodriguez-Izquierdo, J.M., see

Bernal, S. 267 Ross, J.R.H., see Bosch, H. 323 Ross, J.R.H., see Lefferts, L. 291

Saleh, R.Y.
-- and Wachs, I.E.
Reaction network and kinetics
of o-xylene oxidation to

phthalic anhydride over V<sub>2</sub>0<sub>5</sub>/Ti0<sub>2</sub> (anatase) catalysts 87

Shikada, T., see Fujimoto, K. 13 Smart, P., see Wilshier, K.G. 339 Snel, R., see Espinoza, R.L. 259 Stolz, T., see Wilde, M. 99 Subrahmanyam, V.S., see Nag, N.K.

Sung, B., see Berube, M.N. 133

Tan, S.A.
--, Grant, R.B. and Lambert, R.M.
Pressure dependence of ethylene oxidation kinetics and the effects of added CO<sub>2</sub> and Cs:
A study on Ag(111) and

Ag/x-Al<sub>2</sub>0<sub>3</sub> catalysts 159 Trimm, D.L., see Beltramini, J.

Trimm, D.L., see Kohler, M.A. 309
Trimm, D.L., see Kwan, M.Y.H. 25
Umansky, B.S., see Nudel, J.N. 275
Van Ommen, J.G., see Lefferts, L.
291

Vannice, M.A., see Berube, M.N.

Vogt, F., see Wendlandt, K.-P. 65 Wachs, I.E., see Saleh, R.Y. 87 Wainwright, M.S., see Kohler, M.A. 309

Wainwright, M.S., see Kwan, M.Y.H. 25

Weber, M., see Wendlandt, K.-P. 65 Wendlandt, K.-P.

--, Bremer, H., Vogt, F.,
Reschetilowski, W.P., Mörke,
W., Hobert, H., Weber, M. and
Becker, K.
Metal carrier interactions in
zeolite Y catalysts containing

nickel 65 Western, R., see Wilshier, K.G. 339

Wilde, M.

--, Stolz, T., Feldhaus, R. and Anders, K.

The influence of sulfur on activity and selectivity of reforming catalysts in the conversion of individual hydrocarbons 99

Wilshier, K.G.

--, Smart, P., Western, R., Mole,
T. and Behrsing, T.
Oligomerization of propene over
H-ZSM-5 zeolite 339

## SUBJECT INDEX

Acetic acid-ethanol esterification Catalysis by ion-exchange sulfonated resins: comparative study of gel and macroporous types and influence of divinylbenzene concentration 221

The role of transition metal sulfides in hydrotreatment. III. Acidity, XPS and catalytic activity 1

Acidity
Role of the acid-base properties
of aluminas, modified -alumina,
and silica-alumina in 1-butanol
dehydration 361

Adsorption

Metal carrier interactions in zeolite Y catalysts containing nickel 65

Adsorption
Kinetics of the HDO of
methyl-substituted phenols 119

Adsorption
Pressure dependence of ethylene oxidation kinetics and the effects of added CO<sub>2</sub> and Cs: a study on Ag(111) Ag7 -Al<sub>2</sub>O<sub>3</sub> catalysts 159

Adsorption
Catalysis by ion-exchange
sulfonated resins: comparative
study of gel and macroporous
types and influence of
divinylbenzene concentration 221

Adsorption
Bulk, surface and catalytic characterization of the Co<sub>3</sub>O<sub>4</sub>-La<sub>2</sub>O<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub> system 275

Adsorption
The silver-oxygen interaction in relation to oxidative dehydrogenation of methanol 291

Ageing
Sulphur poisoning of supported
palladium methanol synthesis
catalysts 133

Ageing
Poisoning of small metal
particles by poison islands: a
statistical approach based on the
ensemble model 235

Alumina
Role of the acid-base properties
of aluminas, modified -alumina,
and silica-alumina in 1-butanol
dehydration 361

Aluminosilicate gels
Crystallization mechanism of
zeolite beta from (TEA)<sub>2</sub>0,
Na<sub>2</sub>0 and K<sub>2</sub>0 containing
aluminosilicate gels 35

Aromatization
The influence of sulphur on activity and selectivity of reforming catalysts in the conversion of individual hydrocarbons 99

Basicity
Role of the acid-base properties
of aluminas, modified -alumina,
and silica-alumina in 1-butanol
dehydration 361

Benzene

Modified alumina supports for
catalytic oxidation of benzene to
maleic anhydride over vanadia 25

Benzene oxidation

Modified alumina supports for
catalytic oxidation of benzene to
maleic anhydride over vanadia 25

Butadiene hydrogenation
Butadiene hydrogenation on
platinum(100) 243

Butadiene hydrogenation Bulk, surface and catalytic characterization of the Co<sub>3</sub>O<sub>4</sub>-La<sub>2</sub>O<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub> system 275

Butane oxidation
Selective oxidation of n-butane
to maleic anhydride under
oxygen-deficient conditions over
V-P-O mixed oxides 323

Butanol dehydration
Role of the acid-base properties
of aluminas, modified -alumina,
and silica-alumina in 1-butanol
dehydration 361

Carbon dioxide hydrogenation
Selective synthesis of C<sub>2</sub>-C<sub>5</sub>
hydrocarbons from carbon dioxide
utilizing a hybrid catalyst
composed of a methanol synthesis
catalyst and zeolite 13

Carbon monoxide adsorption
Metal carrier interactions in
zeolite Y catalysts containing
nickel 65

Carbon monoxide hydrogenation Sulphur poisoning of supported palladium methanol synthesis catalysts 133

Carbonation
Preparation of lanthana supported rhodium catalysts. Occurrence of

heavy carbonation phenomena on the support 267

Catalyst characterization
The role of transition metal
sulfides in hydrotreatment. III.
Acidity, XPS and catalytic
activity 1

Catalyst characterization

Modified alumina supports for
catalytic oxidation of benzene to
maleic anhydride over vanadia 25

Catalyst characterization
Crystallization mechanism of
zeolite beta from (TEA)<sub>2</sub>0,
Na<sub>2</sub>0 and K<sub>2</sub>0 containing
aluminosilicate gels 35

Catalyst characterization

Metal carrier interactions in
zeolite Y catalysts containing
nickel 65

Catalyst characterization Characterization of supported vanadium oxide catalysts by low temperature oxygen chemisorption technique: II. The  $V_2O_5/SiO_2$  system 73

Catafyst cháracterization
Reaction network and kinetics of
o-xylene oxidation to
phthalicanhydride over
V<sub>2</sub>O<sub>5</sub>/TiO<sub>2</sub> (anatase)
catalysts 87

Catalyst characterization
Pressure dependence of ethylene
oxidation kinetics and the
effects of added CO<sub>2</sub> and Cs: a
study on Ag(111) Ag7 -A1<sub>2</sub>0<sub>3</sub>
catalysts 159

Catalyst characterization
Relation between homogeneous acid
catalysis and ion exchange resins
using a test reaction 179

Catalyst characterization
Catalysis by ion-exchange
sulfonated resins: comparative
study of gel and macroporous
types and influence of
divinylbenzene concentration 221

Catalyst characterization
Preparation of lanthana supported
rhodium catalysts. Occurrence of
heavy carbonation phenomena on
the support 267

Catalyst characterization
Bulk, surface and catalytic
characterization of the
Co<sub>3</sub>O<sub>4</sub>-La<sub>2</sub>O<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub>
system 275

Catalyst characterization
The silver-oxygen interaction in relation to oxidative dehydrogenation of methanol 291

Catalyst characterization
Selective oxidation of n-butane
to maleic anhydride under
oxygen-deficient conditions over
V-P-0 mixed oxides 323

Catalyst characterization
Role of the acid-base properties
of aluminas, modified -alumina,
and silica-alumina in 1-butanol
dehydration 361

Catalyst preparation
Selective synthesis of C<sub>2</sub>-C<sub>5</sub>
hydrocarbons from carbon dioxide
utilizing a hybrid catalyst
composed of a methanol synthesis
catalyst and zeolite 13

Catalyst preparation

Modified alumina supports for
catalytic oxidation of benzene to
maleic anhydride over vanadia 25

Catalyst preparation
Crystallization mechanism of zeolite beta from (TEA)<sub>2</sub>0,
Na<sub>2</sub>0 and K<sub>2</sub>0 containing
aluminosilicate gels 35

Catalyst preparation
Nickel catalysts for steam
reforming of hydrocarbons: direct
and indirect factors affecting
the coking rate 207

Catalyst preparation
Butadiene hydrogenation on
platinum(100) 243

Catalyst preparation
Preparation of lanthana supported rhodium catalysts. Occurrence of heavy carbonation phenomena on the support 267

Catalyst preparation
Preparation of Cu/SiO<sub>2</sub>
catalysts by the ion-exchange
technique 309

Catalyst preparation
Selective oxidation of n-butane
to maleic anhydride under
oxygen-deficient conditions over
V-P-O mixed oxides 323

Cobalt-lanthanum/alumina
Bulk, surface and catalytic
characterization of the
Co<sub>3</sub>O<sub>4</sub>-La<sub>2</sub>O<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub>
system 275

Cobalt-molybdenum/alumina Kinetics of the HDO of methyl-substituted phenols 119

Coke formation
The influence of sulphur on activity and selectivity of reforming catalysts in the conversion of individual hydrocarbons 99

Coke formation

Catalytic reforming of n-heptane

on platinum, tin and platinum-tin supported on alumina 113

Coke formation

Nickel catalysts for steam reforming of hydrocarbons: direct and indirect factors affecting the coking rate 207

Coke formation

Poisoning of small metal particles by poison islands: a statistical approach based on the ensemble model 235

Coke formation

Catalytic oligomerization of ethene over nickel-exchanged amorphous silica-alumina; effect of the nickel concentration 259

Coke formation

Role of the acid-base properties of aluminas, modified -alumina, and silica-alumina in 1-butanol dehydration 361

Copper-zinc

Selective synthesis of C<sub>2</sub>-C<sub>5</sub> hydrocarbons from carbon<sup>2</sup>dioxide utilizing a hybrid catalyst composed of a methanol synthesis catalyst and zeolite 13

Copper/silica

Preparation of Cu/SiO<sub>2</sub> catalysts by the ion-exchange technique 309

Crystallization mechanism
Crystallization mechanism of
zeolite beta from (TEA)<sub>2</sub>0,
Na<sub>2</sub>0 and K<sub>2</sub>0 containing
aluminosilicate gels 35

Deasphalted Morichal hydrotreatment Dehydration

Role of the acid-base properties of aluminas, modified -alumina, and silica-alumina in 1-butanol dehydration 361

Dehydrogenation

Metal carrier interactions in zeolite Y catalysts containing nickel 65

Dehydrogenation

The silver-oxygen interaction in relation to oxidative dehydrogenation of methanol 291

Depolymerization

Relation between homogeneous acid catalysis and ion exchange resins using a test reaction 179

Esterification

Catalysis by ion-exchange sulfonated resins: comparative study of gel and macroporous types and influence of divinylbenzene concentration 221

Ethene oligomerization Catalytic oligomerization of ethene over nickel-exchanged amorphous silica-alumina; effect of the nickel concentration 259

Ethylene oxidation

Pressure dependence of ethylene oxidation kinetics and the effects of added CO<sub>2</sub> and Cs: a study on Ag(111) Ag7 -Al<sub>2</sub>O<sub>3</sub> catalysts 159

Formal dehyde

The silver-oxygen interaction in relation to oxidative dehydrogenation of methanol 291

Heptane reforming

Catalytic reforming of n-heptane on platinum, tin and platinum-tin supported on alumina 113

Hybrid catalyst

Selective synthesis of C<sub>2</sub>-C<sub>5</sub> hydrocarbons from carbon<sup>2</sup>dioxide utilizing a hybrid catalyst composed of a methanol synthesis catalyst and zeolite 13

Hydrocarbon steam reforming
Nickel catalysts for steam
reforming of hydrocarbons: direct
and indirect factors affecting
the coking rate 207

Hydrodemetallization

The role of transition metal sulfides in hydrotreatment. III. Acidity, XPS and catalytic activity 1

Hydrodeoxygenation

Kinetics of the HDO of methyl-substituted phenols 119

Hydrodesulphurization

The role of transition metal sulfides in hydrotreatment. III. Acidity, XPS and catalytic activity 1

Hydrogenation

Selective synthesis of C<sub>2</sub>-C<sub>5</sub> hydrocarbons from carbon<sup>2</sup>dioxide utilizing a hybrid catalyst composed of a methanol synthesis catalyst and zeolite 13

Hydrogenation

Sulphur poisoning of supported palladium methanol synthesis catalysts 133

Hydrogenation

Butadiene hydrogenation on platinum(100) 243

Hydrogenation

Bulk, surface and catalytic characterization of the Co<sub>3</sub>O<sub>4</sub>-La<sub>2</sub>O<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub> system 275

Hydrogenolysis

Metal carrier interactions in zeolite Y catalysts containing nickel 65

Ion exchange resins

Relation between homogeneous acid catalysis and ion exchange resins using a test reaction 179

Ion-exchange resins

Catalysis by ion-exchange sulfonated resins: comparative study of gel and macroporous types and influence of divinylbenzene concentration 221

Modified alumina supports for catalytic oxidation of benzene to maleic anhydride over vanadia 25

Reaction network and kinetics of o-xylene oxidation to phthalic anhydride over V<sub>2</sub>0<sub>5</sub>/Ti0<sub>2</sub> (anatase) catalysts 87<sup>2</sup>

Kinetics

Kinetics of the HDO of methyl-substituted phenols 119

Kinetics Pressure dependence of ethylene oxidation kinetics and the effects of added CO<sub>2</sub> and Cs: a study on Ag(111) Ag7  $-A1_20_3$ catalysts 159

**Kinetics** 

Relation between homogeneous acid catalysis and ion exchange resins using a test reaction 179

Kinetics

Catalysis by ion-exchange sulfonated resins: comparative study of gel and macroporous types and influence of divinylbenzene concentration 221

Kinetics Selective oxidation of n-butane to maleic anhydride under oxygen-deficient conditions over V-P-0 mixed oxides 323

Low temperature oxygen chemisorption Characterization of supported vanadium oxide catalysts by low temperature oxygen chemisorption technique: II. The

V<sub>2</sub>0<sub>5</sub>/Si0<sub>2</sub> system 73 Maleic anhydride

Modified alumina supports for catalytic oxidation of benzene to maleic anhydride over vanadia 25

Maleic anhydride

Selective oxidation of n-butane to maleic anhydride under oxygen-deficient conditions over V-P-0 mixed oxides 323

Metal particle poisoning Poisoning of small metal particles by poison islands: a statistical approach based on the ensemble model 235

Methanol dehydrogenation

The silver-oxygen interaction in relation to oxidative dehydrogenation of methanol

Methanol synthesis

Sulphur poisoning of supported palladium methanol synthesis catalysts 133

Methyl-substituted phenols Kinetics of the HDO of methyl-substituted phenols 119

Nickel/alumina-magnesium

oxide-nickel oxide

Nickel catalysts for steam reforming of hydrocarbons: direct and indirect factors affecting the coking rate 207

Nickel/silica-alumina

Catalytic oligomerization of ethene over nickel-exchanged amorphous silica-alumina; effect of the nickel concentration 259

Nickel/zeolite

Metal carrier interactions in zeolite Y catalysts containing nickel 65

**Oligomerization** 

Catalytic oligomerization of ethene over nickel-exchanged amorphous silica-alumina; effect of the nickel concentration 259

Oligomerization Oligomerization of propene over H-ZSM-5 zeolite 339

Oxidation

Modified alumina supports for catalytic oxidation of benzene to maleic anhydride over vanadia 25

Oxidation 0

Reaction network and kinetics of o-xylene oxidation to phthalic anhydride over V<sub>2</sub>0<sub>5</sub>/Ti0<sub>2</sub> (anatase) catalysts 87<sup>2</sup>

Oxidation

Pressure dependence of ethylene oxidation kinetics and the effects of added CO<sub>2</sub> and Cs: a study on Ag(111) Ag7 -Al<sub>2</sub>O<sub>3</sub> catalysts 159

Oxidation

Selective oxidation of n-butane to maleic anhydride under oxygen-deficient conditions over V-P-0 mixed oxides 323

Oxygen adsorption

Characterization of supported vanadium oxide catalysts by low temperature oxygen chemisorption technique: II. The V<sub>2</sub>0<sub>5</sub>/Si0<sub>2</sub> system Palladium

Sulphur poisoning of supported palladium methanol synthesis catalysts 133

Perovskite/alumina
Bulk, surface and catalytic
characterization of the
Co<sub>3</sub>O<sub>4</sub>-La<sub>2</sub>O<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub>
system 275

Platinum

Butadiene hydrogenation on platinum(100) 243

Platinum-tin/alumina
Catalytic reforming of n-heptane
on platinum, tin and platinum-tin
supported on alumina 113

Platinum/alumina
The influence of sulphur on
activity and selectivity of
reforming catalysts in the
conversion of individual

hydrocarbons 99 Platinum/alumina

Catalytic reforming of n-heptane on platinum, tin and platinum-tin supported on alumina 113

Poisoning
Oligomerization of propene over
H-ZSM-5 zeolite 339

Poisoning model
Poisoning of small metal
particles by poison islands: a
statistical approach based on the
ensemble model 235

Propene oligomerization Oligomerization of propene over H-ZSM-5 zeolite 339

Reforming
Catalytic reforming of n-heptane
on platinum, tin and platinum-tin
supported on alumina 113

Regeneration
Catalytic oligomerization of
ethene over nickel-exchanged
amorphous silica-alumina; effect
of the nickel concentration 259

Rhodium/lanthana
Preparation of lanthana supported
rhodium catalysts. Occurrence of
heavy carbonation phenomena on
the support 267

Selectivity
Selective synthesis of C<sub>2</sub>-C<sub>5</sub>
hydrocarbons from carbon dioxide
utilizing a hybrid catalyst
composed of a methanol synthesis
catalyst and zeolite 13

Selectivity
Modified alumina supports for
catalytic oxidation of benzene to
maleic anhydride over vanadia 25

Selectivity
Metal carrier interactions in
zeolite Y catalysts containing
nickel 65

Selectivity
Reaction network and kinetics of

o-xylene oxidation to phthalic anhydride over V<sub>2</sub>0<sub>5</sub>/Ti0<sub>2</sub> (anatase) catalysts 87

Selectivity
The influence of sulphur on activity and selectivity of reforming catalysts in the conversion of individual hydrocarbons 99

Selectivity
Catalytic reforming of n-heptane
on platinum, tin and platinum-tin
supported on alumina 113

Selectivity
Kinetics of the HDO of
methyl-substituted phenols 119

Selectivity
Sulphur poisoning of supported
palladium methanol synthesis
catalysts 133

Selectivity
Pressure dependence of ethylene oxidation kinetics and the effects of added CO<sub>2</sub> and Cs: a study on Ag(111) Ag7 -A1<sub>2</sub>O<sub>3</sub> catalysts 159

Selectivity
Pressure dependence of ethylene oxidation kinetics and the effects of added CO<sub>2</sub> and Cs: a study on Ag(111) Ag7 -Al<sub>2</sub>O<sub>3</sub> catalysts 159

Selectivity
Catalysis by ion-exchange
sulfonated resins: comparative
study of gel and macroporous
types and influence of
divinylbenzene concentration 221

Selectivity
Butadiene hydrogenation on platinum(100) 243

Selectivity
Catalytic oligomerization of
ethene over nickel-exchanged
amorphous silica-alumina; effect
of the nickel concentration 259

Selectivity
Bulk, surface and catalytic characterization of the Co<sub>3</sub>O<sub>4</sub>-La<sub>2</sub>O<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub> system 275

Selectivity
Preparation of Cu/SiO<sub>2</sub>
catalysts by the ion-exchange
technique 309

Selectivity
Selective oxidation of n-butane
to maleic anhydride under
oxygen-deficient conditions over
V-P-O mixed oxides 323

Selectivity
Oligomerization of propene over
H-ZSM-5 zeolite 339

Silica-alumina

Catalytic oligomerization of ethene over nickel-exchanged amorphous silica-alumina; effect of the nickel concentration 259

Silica-alumina

Role of the acid-base properties of aluminas, modified -alumina, and silica-alumina in 1-butanol dehydration 361

Silver

Pressure dependence of ethylene oxidation kinetics and the effects of added CO<sub>2</sub> and Cs: a study on Ag(111) Ag7 -Al<sub>2</sub>O<sub>3</sub> catalysts 159

Silver

The silver-oxygen interaction in relation to oxidative dehydrogenation of methanol 291

Silver/alumina

Pressure dependence of ethylene oxidation kinetics and the effects of added CO<sub>2</sub> and Cs: a study on Ag(111) Ag/ -Al<sub>2</sub>O<sub>3</sub> catalysts 159

Single crystal model

Pressure dependence of ethylene oxidation kinetics and the effects of added CO<sub>2</sub> and Cs: a study on Ag(111) Ag7 -Al<sub>2</sub>O<sub>3</sub> catalysts 159

Sintering

Poisoning of small metal particles by poison islands: a statistical approach based on the ensemble model 235

Steam reforming

Nickel catalysts for steam reforming of hydrocarbons: direct and indirect factors affecting the coking rate 207

Steam treatment of gamma-alumina Modified alumina supports for catalytic oxidation of benzene to maleic anhydride over vanadia 25

Strong metal-support interaction Metal carrier interactions in zeolite Y catalysts containing nickel 65

Sulphonated styrene-divinylbenzene Catalysis by ion-exchange sulfonated resins: comparative study of gel and macroporous types and influence of divinylbenzene concentration 221

Sulphonic acid/polystyrene Relation between homogeneous acid catalysis and ion exchange resins using a test reaction 179

Sulphur

The influence of sulphur on activity and selectivity of

reforming catalysts in the conversion of individual hydrocarbons 99

Sulphur poisoning Sulphur poisoning of supported palladium methanol synthesis

catalysts 133 Surface structure

Characterization of supported vanadium oxide catalysts by low temperature oxygen chemisorption technique: II. The

V<sub>2</sub>0<sub>5</sub>/Si0<sub>2</sub> system 73
Temperature programmed desorption
The silver-oxygen interaction in relation to oxidative

dehydrogenation of methanol 291
Temperature programmed desorption
Role of the acid-base properties
of aluminas, modified -alumina,
and silica-alumina in 1-butanol
dehydration 361

Temperature programmed reduction
The silver-oxygen interaction in
relation to oxidative
dehydrogenation of methanol 291
The role of transition metal
sulfides in hydrotreatment. III.
Acidity, XPS and catalytic
activity 1

Tin/alumina

Catalytic reforming of n-heptane on platinum, tin and platinum-tin supported on alumina 113

Transition metal sulphides
The role of transition metal
sulfides in hydrotreatment. III.
Acidity, XPS and catalytic
activity 1

Trioxane depolymerization
Relation between homogeneous acid
catalysis and ion exchange resins
using a test reaction 179

Vanadia/alumina

Modified alumina supports for catalytic oxidation of benzene to maleic anhydride over vanadia 25

Vanadium pentoxide/silica
Characterization of supported vanadium oxide catalysts by low temperature oxygen chemisorption technique: II. The V<sub>2</sub>O<sub>5</sub>/SiO<sub>2</sub> system 73

Vanadium pentoxide/titania
Reaction network and kinetics of o-xylene oxidation to phthalic anhydride over V<sub>2</sub>O<sub>5</sub>/TiO<sub>2</sub> (anatase) catalysts 87

Vanadium-phosphorus oxide
Selective oxidation of n-butane
to maleic anhydride under
oxygen-deficient conditions over
V-P-O mixed oxides 323

X-ray photoelectron spectroscopy
The role of transition metal
sulfides in hydrotreatment. III.
Acidity, XPS and catalytic
activity 1

Xylene oxidation
Reaction network and kinetics of
o-xylene oxidation to phthalic
anhydride over V<sub>2</sub>0<sub>5</sub>/Ti0<sub>2</sub>
(anatase) catalysts 87<sup>2</sup>

Zeolites
Selective synthesis of C<sub>2</sub>-C<sub>5</sub>
hydrocarbons from carbon dioxide
utilizing a hybrid catalyst

composed of a methanol synthesis catalyst and zeolite 13

Zeolites

Crystallization mechanism of zeolite beta from (TEA) 0, Na 0 and K 0 containing aluminosilicate gels 35

Zeolites

Metal carrier interactions in zeolite Y catalysts containing nickel 65

Zeolites

Oligomerization of propene over H-ZSM-5 zeolite 339

